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ABSTRACT

The purpose of the study was to determine the adequacy of the business administration department curricula of the Williamsport Area Community College in meeting the needs of graduates and employers. Graduates from 1969 to 1973 in accounting, management, and secretarial science were surveyed via mail questionnaires on their degree of satisfaction with the training they had received in their programs. Employers of the school's graduates were also assessed by the same method concerning their evaluation of the caliber of work performed by the graduates. The findings supported the conclusions that both the graduates and the employers were satisfied with the school's program. Samples of the survey questionnaires are appended. (NJ)

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FINAL REPORT

A FOLLOW UP STUDY OF GRADUATES AND EMPLOYERS RELATING TO THE BUSINESS ADMINISTRATION CURRICULA OF THE WILLIAMSPORT AREA COMMUNITY COLLEGE

(Project No. 193021)

by

Donald B. Bergerstock

THE WILLIAMSPORT AREA COMMUNITY COLLEGE

WILLIAMSPORT, PENNSYLVANIA

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I

INTRODUCTION

Because business is changing so rapidly and education itself is undergoing one of its periodic phases of change, the people involved must be alert to the pressures on education in general and to the needs of the business community. In order that these business needs might be put in their proper perspective, there should be a close, harmonious relationship between businessmen and business educators. Education will gain some of the excitement, tension, and realism of business; while business will gain perspective, insight, and the stimulus of new knowledge and new ideas.

The nation's increased demand for office workers over the past several decades has had a direct effect on the post-secondary business education curricula. As Seldon (1973) points out, the business and office occupation group has been one of the fastest growing areas of employment since 1900 and represents the largest occupational group in the nation. It consists of approximately 13.5 million workers, or 17 percent of the total number of people employed in America. Of this 13.5 million, 3.7 million are secretaries, stenographers, and typists, and 9.8 million are clerical employees. By 1980 an estimated 17.3 million people will be employed as clerical employees.

Since business education is primarily vocational in nature, these increased manpower needs of the employment market--local, state, and nation--must be analyzed carefully. Those responsible for business

education programs on all levels must exercise leadership in the development of curricula to meet these increased demands of the business world. Therefore, it is the purpose of this study to provide a more thorough understanding of student needs and employer needs as they relate to employment in the field of business; and in the final analysis to produce business curricula to meet these various needs.

The Status of Office Work in the Economy

The Projected Labor Force

Due to the evolution of modern technology, the business-type occupations have witnessed an ever-increasing growth pattern that no other occupation has ever witnessed.

During the 1970's the total labor force of the United States is estimated to expand by 15.9 million, reaching 101.8 million by 1980 (United States Department of Labor, 1973). Of this total labor force projection, it is estimated that 18.2 percent will be employed in the business area by 1980 (United States Department of Labor, 1970). These statistics suggest that roughly one out of every five persons will be employed in some facet of business by the next decade.

To facilitate this need, Pittenger (1973) suggests that business education departments should conduct surveys of office facilities and personnel requirements and do follow-up studies of graduates of the business programs. Research of this type helps to evaluate the adequacy of instruction presently being offered to business students and suggests the changes that should be made in the immediate future.

Women in the Labor Force

Another vital aspect regarding the projected labor force as it relates to this study regarding office-type occupations is that of women in the job market. It is almost certain that women will continue to have a greater impact, numerically, in the total work force. If present trends continue, (United States Department of Labor, 1970 p. 7) many women will be available for part-time work in the future, but the majority of them will be working full time.

From 1960 to 1968, the increase in the number of women workers exceeded tha increase in the number of men. During this period, women accounted for 60 percent of the labor growth and increased their proportion in the total labor force from 32.1 to 35.5 percent. The projections indicate the possibility that women will contribute 43 percent to the net labor force increase in 1968-1980, thereby expanding their proportion in the total labor force to almost 37 percent (United States Department of Labor, 1970, p. 4, 5).

This projected growth of women in the labor market is quite relevant to educators who are planning revisions and additions to their curricula. A large percentage of the women entering the labor market will be employed in the area of business--clerical, secretarial, and stenographic positions. If this is where the growth is going to occur, many more women will have to be trained, and possibly retrained, to enter this type of vocation. It will be most essential to offer not only what the student needs for initial employment, but to offer also what the employer deems necessary for an individual to successfully carry out his day-to-day assignments in our complex business enterprises.

Educational Attainment of Workers

Since the end of World War II, the American worker who has had at least four years of high school has become the rule rather than the exception, and his numbers are steadily increasing. According to the most recent survey on educational attainment taken by the Bureau of Census in March, 1972 (United States Department of Labor, 1972), the proportion of 18- to 64-year old workers who have completed at least four years of high school has more than doubled in the last 30 years--from 32 to 69 percent.

The general upgrading in workers' education over the past decade has not been confined to occupations which require considerable formal training or education. In every major occupational group there has been a gain in educational attainment. As Newman (1972) points out, these trends suggest a growing need for institutions offering specialized training and education beyond high school. The community colleges represent a valuable resource for providing specialized training, usually at lower costs than the more traditional four-year colleges or universities, and may be expected to give rise to further increases in the proportion of more educated young entrants to the labor force (United States Department of Labor, 1972, p. 42).

Relating to educational attainment and post-secondary education, the Pennsylvania Department of Education (1972) has published the following:

> The 13,335 Associate Degrees awarded in 1971-72 reflect a 33 percent increase over the 10,025 degrees reported in 1970-71. The increase of 3,300 Associate Degrees since 1970-71 is largely due to the Department of Education's approval of specialized business and specialized technology programs in the 37 proprietary schools in Pennsylvania. Of the 3,300 degree increase, the community college segment had 1,410, giving them a 6,362 total which represents nearly 49 percent of the total degrees awarded (p. 31).

This increase in the amount of education which young people are seeking and receiving will continue to play an ever-increasing role for those people involved in curriculum building. The administrators and educators of today's and tomorrow's educational institutions are going to have to keep abreast of the modern technologies and the most up-to-date methods of instruction. Only in this manner will they be able to offer a relevant education to the recipients--one that they can successfully carry over and use in their chosen vocation once they enter the labor market.

Follow-up Studies to Improve Curriculum Objectives

As the literature suggests, one of the best techniques for curriculum revision and innovation is the use of follow-up studies. This is best accomplished by utilizing both the graduates and their employers.

O'Connor (1965), in his suggestions for institutional improvements among community colleges, relates the importance of follow-up studies as follows:

1. Follow-up provides the student with reliable information regarding the success of former students transferring to four-year colleges, or entering employment; jusitifies subject requirements for graduation; and gives incentive for developing traits and competence in ways shown to be requisite for future success.

2. Follow-up provides the instructor with firsthand evidence of the effectiveness of his teaching, the reasonableness of his standards, and the relevance of the material he includes in his course.

3. Follow-up research is as important to the community college as market research is to a pioneering business.

4. Follow-up gives the counselor a factual basis for advising students regarding career choice, sources of advanced study, course selection, extracurricular participation, and success expectation.

5. Follow-up provides the college with facts upon which to base admissions policies; develop and organize course content; establish performance standards; improve articulation with parents, high schools, senior colleges, and industry; and suggests a means of planning new curriculums and other extensions of educational effort.

6. Follow-up offers the community means of identifying gaps in educational service; creates confidence in the efforts of the college; increases the productivity of college-trained recruits; and provides means of insuring effective occupational upgrading (p. 9, 10).

One of the most vital, frequently neglected, and yet highly important areas of follow-up studies is that of students in technical-occupational curricula. These studies are more difficult than studies of transfer students for the following reasons (O'Connor, 1965):

1. Technical-occupational students quickly disperse; they are difficult to find.

2. Because of the dispersion, greater reliance must be put on the questionnaire as a source of information.

3. Not all students who become employed after they leave junior college were enrolled in technical-occupational curriculums in the junior college.

4. Caution must be used to separate the dropouts from the occupationally prepared.

5. Standards of acceptable employment performance vary widely in business and industry.

6. Response from occupational students, especially when the questionnaire is the only means to reach them, is frequently low (p. 38).

No matter how difficult the follow-up of career-oriented graduates may be, the writer contends that it must be done if we are able to offer relevant occupational educational to today's youth.

As suggested by Little (1970), follow-up studies of graduates of vocational education programs, if carefully planned and executed, can provide an important base of information to educational planners and

administrators and to future vocational-technical students. When coupled with appropriate economic analysis, this type of information can provide guidance for improving decision-making by governments and institutions concerning questions of priorities among types, levels, and fields of education and training programs as well as assisting in the proper allocation of resources to these various programs.

The Advisory Council on Vocational Education, 1968, states that (Little, 1970):

> Effective occupational preparation is impossible if the school feels that its obligation ends when the student graduates. The school, therefore, must work with employers to build a bridge between school and work. Placing the student on a job and following up his successes and failures provides the best possible information to the school on its strengths and weaknesses (p. 38).

Summary

In light of what has been presented regarding the projections of employment in the business-type occupations, there appears to be an increasing demand in this area. The business occupations have been steadily increasing since the early 1900's. Women will play an ever-increasing role in this rapid expansion of workers in the business occupations since more and more of them are entering the labor market every day.

Based upon these projections, it is an absolute necessity that educators and curriculum builders take these facts into consideration when preparing, revising, and up-dating future courses of study and curricula.

As pointed out earlier in this chapter, one of the best techniques to employ for curriculum revisions is that of the follow-up questionnaire. When this technique is utilized to its fullest potential, the

writer contends that a better curriculum will be in the offing. As Little (1970) suggests, both graduates and prospective employers should have input into curriculum revisions. The graduates, as well as the employers, know after several days on the job whether the training they received is adequate or whether something vitally important is lacking in that training.

One of the major attributes of this study was to use the follow-up type questionnaire technique to survey The Williamsport Area Community College Business Administration Department graduates and their employers. Using this approach, the writer hoped to assess both interested parties--the graduate who was using the skills acquired, and the employer who hired the graduate. It was believed that better business department curricula would result from the utilization of the questionnaire technique approach.

Purpose of the Study

The first purpose of this study was to assess the graduates' feelings and attitudes toward the curriculum in which they were enrolled and also to assess the relevance of the courses they pursued as related to their present occupation.

The second purpose was to assess the feelings and attitudes of the employers of the business graduates concerning their evaluation of the caliber of work performed by the graduates.

The underlying objective of this study was to secure supporting data for the researcher so that he could be certain that the Business Administration Department was providing the most relevant program of studies to the students enrolled therein; and, in turn, meeting the high-quality standards set by the businessmen who hired the graduates.

Business education in the community college must be adaptive to the changing occupational structure of the labor force. Rapidly changing social, economic and technological developments demand that community colleges constantly evaluate, and in many instances, modify their curricula. Wood (1955) pointed out this characteristic of the community college as follows:

> Above all other institutions of higher learning, the community junior college is responsive to change at the community level ..... its special function is to make higher education a continuing and essential feature of everyday life for the millions (p. 31).

In response to the ever-changing needs of the communities they serve, community colleges are utilizing many curricular innovating devices. Some of these new educational tools are learning-resource centers, programmed instruction, television, and auto-tutorial instruction programs.

Since the community college is a college for the "community," another purpose of this study was to be certain that the most relevant programs of education were offered--not only for the full-time, day students, but also for the adults in the service area. Although the adults were not surveyed by this particular instrument, the writer contends that a wealth of information can be ascertained from this study relating to some of the wishes and desires of the businessmen in the community as to what should be taught by the Business Administration Department of a community college. Only after these wishes have been ascertained can relevant curricula be incorporated. It was hoped that the end result of this study would be the adoption of curricula which are "all things to all people."

Statement of the Problem

The purpose of this study was to determine whether or not the Business Administration Department curricula of The Williamsport Area Community College is fulfilling its aims and objectives and satisfying the needs of the employed graduate and the employer. From this study, it was the researcher's intent to find the strengths as well as the weaknesses of the Business Administration Department curricula. How do the graduates react to the training they have received? Has their training been worthwhile? What type of work are they presently engaged in? What do the employers think of the graduates they are receiving? Are they equipped with enough skills to enter the business world?

Formally stated, the research questions to be answered in this study were as follows:

1. To what extent do the Accounting graduates perceive themselves as having received adequate training to perform satisfactorily on the job?
2. To what extent do the Business Management graduates perceive themselves as having received adequate training to perform satisfactorily on the job?
3. To what extent do the Secretarial graduates perceive themselves as having received adequate training to perform satisfactorily on the job?
4. To what extent are the employers satisfied with the Accounting graduates?
5. To what extent are the employers satisfied with the Management graduates?
6. To what extent are the employers satisfied with the Secretarial graduates?

Need for the Study

The primary purpose for the undertaking of this study was to assess the needs of the graduates and the employers with the intent of curricula revision where necessary.

The idea of developing, revising, and updating curricula to meet on-the-job needs was done very well by a study conducted by Battelle Columbus Laboratories (1972). The major objective of this study was to develop a method which school system could use to reduce discrepancies between employer-desired skills and curriculum-produced skills. As suggested by this study, the method of curriculum development, revision, and updating has seven steps:

1. Decide on curriculum organization and select program offerings, based on assessment of:

   Employment opportunities
   Student body desires and needs
   Resources and constraints

2. Assess employer and job requirements
3. Formulate performance objectives for programs, and select/develop measures of attainment of objectives.
4. Assess characteristics of target populations
5. Design programs

   a. Course and other instructional units within programs
   b. Instructional strategies and methods, contents, sequencing, materials, equipment, and the media

6. Implement and conduct programs

   a. Assess entry level skills and knowledges
   b. Assess attainment of objectives

7. Conduct follow-up of graduates

   a. Job placement
   b. Job performance
   c. Employer and job requirements
   d. Mobility (p. 89)

No intelligent decision regarding curricular innovations and revisions can be made until most of the above mentioned criteria for curricular revision as suggested by the study are met. Unintelligible and unrelevant curricula will be established if the college administrators do not listen to the graduates and employers in such vital matters.

As Mitminger (1972) points out, the community college is vocationally- and community oriented. Pertaining to the curriculum of the community college, he suggests

> the term "community college" must not be a misnomer. Our guiding principle should be the active involvement of our students, faculty, and administrators in community affairs wherever possible. The college campus must be a major center for community life and the involvement of people, and at the same time we must, wherever possible, extend the college campus into the community by offering services and programs at locations most convenient to students and members of the public who seek advancement and enrichment in their professional and social lives (p. 13).

Along these same lines of the community college curricula, Watson and Brightman (1969) imply that evidence is needed showing the extent to which community colleges, by means of various programs, are in fact meeting the educational needs of their clientele.

Current emphasis on education as a means of coping with problems involving employment, shortages of trained technicians, and poverty have resulted in considerable public and private expenditures to improve and expand educational opportunities for Americans. Congruent with the need to expand and improve education is the need to evaluate the educational processes offered at colleges and other institutions to determine how best to expand and what to improve.

As pointed out by the literature, the need for a study such as this is far-reaching. Too many times in too many institutions are the curricula developed by either looking at catalogues and brochures from sister institutions or by a group of educators who have never had any business experience of their own. Too many curricula are planned and adopted simply on the basis that the educators feel that "these are the courses the students need."

Delimitations of the Study

This study was limited to the 1969-1973 Accounting, Management and Secretarial graduates of The Williamsport Area Community College and the employers of such graduates.

This study was limited in that it compares the graduates from only one institution. However, for the purpose of curriculum revision this was the writer's intent--to survey only this one school and to incorporate, if possible, the needed revisions to the curricula as evidenced by this study.

Another limitation to this study was the response given by both graduates and employers. Since the instrument employed was a mail-out questionnaire, the subjects selected to participate may or may not have done a conscientious job in completing the questionnaire.

This study was further limited by comparing graduates only from the years 1969 to 1973.

Definition of Terms

The Williamsport Area Community College: is a public, two-year, post-secondary institution. Eighty percent of the training is in the Applied Arts school, or career-oriented programs; while the remaining

20 percent is in Liberal Arts, or college-transfer programs.

Business Education: is that area of the educational process which concerns itself with vocational preparation of the student to enable him to pursue a career in some phase of business. The offering of important business information to every citizen and consumer in order that he may better understand and use his business and economic surroundings is another important aspect of business education.

Accounting Curriculum: is a structured sequence of formal courses leading to an Associate Degree in Accounting. The successful completion of this curriculum enables one to secure employment in the field of bookkeeping or accounting. Courses such as elementary, intermediate, and advanced accounting, finance, business mathematics, computer programming, and elementary statistics are taught in the curriculum.

Business Management Curriculum: is a formal sequence of courses leading to an Associate Degree in Business Management. The graduate of this curriculum is prepared to secure employment in many of the following areas: banking, insurance, real estate, personnel work, business managerial positions, and almost any phase of general business-type employment. Courses such as principles of business, business organization and management, accounting, elementary statistics, business mathematics, and computer programming are taught in this curriculum.

Secretarial Curriculum: is a structured sequence of courses leading to an Associate Degree in Secretarial Science with specialization as an Executive, Legal, or Medical Secretary. The graduate of this curriculum has very little difficulty in finding immediate employment in a stenographic, clerical, or secretarial position. Such courses as elementary, intermediate, and advanced shorthand, transcription, typewriting,

business English, elementary bookkeeping, office machines, and business correspondence are taught in this curriculum.

Businessmen: refers to those people who are actively engaged in some phase of a business-type endeavor. This may range from a one-man business, or single proprietorship, to a large corporation.

II

FINDINGS AND ANALYSIS

The primary purpose of this study was to obtain data which could be used for curriculum planning and evaluation.

This particular study has specific implications for the Business Administration Department of The Williamsport Area Community College. However, the investigator contends that many of the specific findings would apply throughout the state and nation; especially where two-year, career-oriented, community college graduates are employed.

Curricula Data--Graduates

Use of Associate Degree Topics on Job. The Accounting graduates felt the most important courses they had in college which related to their present jobs were: (1) accounting principles, (2) business communications, (3) business mathematics, and (4) business machines. Those courses listed as being used very little on their present jobs were: (1) computer programming, (2) business law, (3) income tax, and (4) cost accounting.

The Management graduates listed the following courses as being the most important ones related to their present jobs: (1) business communications, (2) business mathematics, (3) business machines, and (4) principles of business. Those courses listed as being used very little were: (1) computer programming, (2) income tax, and (3) business law.

The Secretarial graduates felt that the most important courses they had relating to their present jobs were: (1) typewriting, (2) office practice, and (3) business communications. They listed the least important courses as being: (1) keypunching, (2) computer programming, and (3) accounting principles.

All graduates listed business communications as one of the most important courses relating to their present jobs. Likewise, all graduates listed computer programming as being used very little on their present jobs.

Graduates' Attitudes Towards Instructors. The graduates from all three disciplines surveyed rated the instructors as doing a very commendable piece of work in dealing with young people.

Possible Course Additions. The Secretarial graduates were quite neutral when asked for suggestions about new courses to be added to the curriculum. The majority felt that the curriculum should remain as it is. Seventy-four percent of the Management graduates agreed that a course in purchasing management should be added to the management curriculum; and 88 percent of the Accounting graduates felt that a course in auditing should be added to the accounting curriculum.

Employer Changes. The majority of the graduates were still with their first employer or changed employment no more than one time since graduation. Those graduates with their first employer are as follows: Accounting (43 percent), Management (52 percent), and Secretarial (44 percent). Those who changed employers one time since graduation were as follows: Accounting (21 percent), Management (28 percent), and Secretarial (22 percent).

Salary. The mean annual salary for Accounting graduates was $7,058. The 1969 graduates reported earnings of $7,921, while the latest, 1973 graduates, reported annual earnings of $6,487. The difference of $1,434 in salary is attributed to the five years that 1969 graduates have been working and receiving annual salary increments. However, the increase

in salary is attributed to the five years that the 1969 graduates have been working and receiving annual salary increments. However, the writer contends that this difference is not as significant as it possibly could or even should be. If the difference was averaged over the five years, it represents only a $236.80 increment each year. From this data, the writer assumes that the earlier graduates are not keeping pace with the salary scale and cost-of-living index as dictated by the economy.

The Management graduates reported a mean annual salary of $8,508. The 1969 graduates reported an annual salary of $9,018, while the 1973 graduates reported earnings of $8,034. The difference of $984 is even worse for the Management than for the Accounting graduates. In reality, the earlier graduates are receiving an annual increment of only $196.80.

The mean annual salary for Secretarial graduates was $6,068. The 1969 graduates reported earnings of $6,418, while the 1973 graduates reported their salary as $5,851. This five-year salary difference of only $567 implies that the secretaries either started on a much lower scale or are not keeping pace with the cost of living. The difference is an increase of only $113.40 per year that the earlier graduates are receiving over the 1973 graduates.

Those graduates employed within the sponsoring districts of the college earned the lowest annual salaries. The Accounting and Secretarial graduates employed outside of Pennsylvania earned almost $1,000 more annually than those employed within the sponsoring districts.

The male Accounting graduates earned $717 more than the female graduates, while the male Management graduates earned $2,974 more annually than the female Management graduates. From this data it is assumed by the writer that the female graduates are accepting more of the secretarial-type jobs, thus receiving a lower annual salary.

There was no significant difference in salary between those graduates accepting employment in related fields and those in non-related fields. The Accounting graduates who secured employment in non-related areas earned only $173 more annually than those employed in related areas. The Management graduates earned only $28 more in non-related occupations than those employed in related areas.

Curricula Data--Employers

Attributes Possessed by Graduates. The employers of Accounting and Secretarial graduates listed the most important attribute as being able to understand accounting and secretarial concepts. Eighty-eight percent of the Accounting employers and 74 percent of the Secretarial employers listed this as being the most important attribute for which they are looking in young people. Seventy-two percent of the employers of Management graduates felt that the ability to motivate others was the most important attribute in young people today. Familiarization with computer programming was listed as the least important attribute to be possessed by the Accounting and Management graduates.

Skills and Work Attitudes. Almost all the employers felt that the skills and work attitudes possessed by the graduates were quite satisfactory. Those employers agreeing that the graduates had adequate skills to adapt to their particular type of business were as follows: Accounting (93 percent), Management (91 percent), and Secretarial (94 percent).

Regarding work attitudes, those employers agreeing that the graduates displayed the ability of getting along with fellow employees were as follows: Accounting (95 percent), Management (89 percent), and Secretarial (86 percent).

Use of Office Machines and Equipment. The Accounting employers listed the ten-key adding-listing machine and the electronic calculator as being the most important types of office equipment used by accountants. The Management employers listed all types of office machines and equipment as being used very little in their particular occupation, while the Secretarial employers listed the typewriter as being used almost 100 percent by the graduates. All three types of employers queried, listed the rotary calculator as being used very little in modern-day business.

Use of Data Processing Equipment. All employers responded that the graduates from all disciplines need to know very little about the various kinds of data processing equipment. In comparison, however, the Management graduates were listed as using this type of equipment the most, followed by the Accounting graduates, and lastly, the Secretarial graduates. However, the findings of this study are interpreted by the researcher to mean that the graduates of the Business Administration Department of the college are using data processing equipment very little. These findings do not necessarily go along with public opinion that business and the computers are inseparable.

Conclusions

The following conclusions are supported by the findings of this study:

1. The graduates appear to be satisfied with the skills and training which they acquired while enrolled at The Williamsport Area Community College.
2. The graduates seem to be highly satisifed with the professors and the type of instruction which they received while students.

3. The employers seem to feel that the graduates have received adequate training to perform satisfactorily in their type of business.
4. It would appear that the expressed degree of satisfaction by the employers indicates the present curricula is adequate.
5. The following courses or associate degree topics were listed by the graduates as being the most important in their present job:

   Accounting Graduates

   a. accounting principles
   b. business communications
   c. business mathematics

   Management Graduates

   a. business communications
   b. business mathematics
   c. business machines
   d. principles of business

   Secretarial Graduates

   a. typewriting
   b. office practice
   c. business communications

6. The following courses or associate degree topics were listed by the graduates as being the least important in their present job:

   Accounting Graduates

   a. computer programming
   b. business law
   c. income tax accounting

Management Graduates

a. computer programming

b. income tax accounting

c. business law

Secretarial Graduates

a. keypunching

b. computer programming

c. accounting principles

7. Computer programming, computers, and all the auxiliary equipment are used very little by the graduates in their present occupations.
8. The male Accounting and Management graduates are earning substantially more than the female graduates. This indicates that some form of discrimmination along sexual lines is occurring.
9. Graduates employed in non-sponsoring districts and out of state receive a higher annual salary than those employed by firms located within the sponsoring districts.
10. Highest annual salaries are earned by Management graduates, followed by the Accounting graduates, and finally the Secretarial graduates.
11. Over the five-year period covered by this study, the majority of all graduates changed employers no more than one time.
12. Relating to small office machines and equipment, the rotary calculator is used very little in modern-day business.
13. Business communications or business English is probably the most important course taught by the Business Administration Department to all students.

14. Computer programming and business law are probably the two least important courses being offered to the students in this department.

Recommendations

Recommendations for Curricula Evaluation

Based on the findings of this study, the researcher recommends the following:

1. A course in auditing should be included in the Accounting curriculum.
2. A second semester business law course could be eliminated or offered as an elective in the Accounting or Management curricula.
3. The Accounting and Management curricula should require only an introductory course in computer programming. If the students desire to take more work in this area, they could do so through electives. No formal course in data processing should be required in the Secretarial curriculum. Probably an 8-week mini course could be offered for those students interested in learning keypunching.
4. Business communications and business mathematics should be required in all sequences.
5. The offering of instruction on the rotary calculator in the business machines course could be eliminated. This time could be better utilized for instruction on the more modern electronic calculators and paper tape machines.
6. The findings of this study should be made available to any business department faculty member or administrator who is contemplating course revisions or innovations to their present curricula.

7. These findings should also be made available to any craft advisory committees who are working closely with the business educators.

APPENDIX A

Letter and Questionnaire Sent
to Accounting Graduates

Dear :

I am conducting a study for my doctoral dissertation in the Department of Vocational Education at the Pennsylvania State University under the direction of Professor Angelo C. Gillie, Sr. It is my hope that the outcome of this study will improve the Business Administration Department Curriculum at the Community College so that we may better meet the needs of our students and their prospective employers. To do this we need your help.

Automation and the computers are changing the business setup so rapidly that we cannot predict today what our students will encounter even two years from now. Only good basic training will keep them employable in this rapidly changing world.

You are meeting these changes every day. Think back. Which courses have helped you the most in your job? Which ones could have been eliminated? Is there other training you now realize could have been advantageous?

Enclosed is a brief questionnaire designed to help us evaluate our present Accounting Curriculum. Through your realistic and frank answers, this task can be accomplished. You have taken the courses and are now employed in the trade. You, better than anyone, know if your training has been worthwhile. Only group statistics will be used in this study; therefore, your responses will remain anonymous, as provided by the coded identifier.

Will you please take ten minutes of your time to complete the questionnaire and return it in the enclosed envelope as soon as possible. An analysis of the findings will be mailed to you at a later date.

Sincerely yours,

Donald B. Bergerstock, Chairman
Business Administration Department

Enclosures

NOTE TO PARENTS

If your son or daughter is not living at the above address, will you please see that he or she receives this material. Thank you.

_ _ _ _ _ _ _ Coded Identifier

Name of Employer_____

Address of Employer_____

Present Title_____

Present annual salary (before deductions) $_____

Number of times you changed employers since graduation._____

1. Please check the column that would indicate the extent to which you use the following Associate Degree topics on your present job:

	Very Much	Much	Some	Little	None
Accounting Principles	____	____	____	_____	____
Cost Accounting	____	____	____	_____	____
Income Tax Accounting	____	____	____	_____	____
Business Communications	____	____	____	_____	____
Business Mathematics	____	____	____	_____	____
Typewriting	____	____	____	_____	____
Business Machines	____	____	____	_____	____
Computer Programming	____	____	____	_____	____
Principles of Business	____	____	____	_____	____
Business Law	____	____	____	_____	____

2. Rank the following courses in the order which you feel they helped to prepare you for your present job. The course considered most important should be ranked 1, while the least important course of this group should be ranked 6:

Rank Order	Courses
_____	Elementary Accounting
_____	Typewriting
_____	Computer Programming
_____	Cost Accounting
_____	Business Management
_____	Advanced Accounting

3. Please check the most appropriate responses for each of the following. The instructors I had while enrolled in the Business Administration Department at WACC:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a. showed concern for me on a personal basis	_____	_____	_____	_____	_____
b. were willing to spend extra time with me	_____	_____	_____	_____	_____
c. increased my interest in a business career	_____	_____	_____	_____	_____
d. gave me an understanding of accounting concepts	_____	_____	_____	_____	_____

4. Please check the most appropriate response for each of the following. I feel the Accounting Curriculum at WACC should have a course in:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a. Business Statistics	_____	_____	_____	_____	_____
b. Managerial Accounting	_____	_____	_____	_____	_____
c. Auditing	_____	_____	_____	_____	_____
d. Other_____ (Please list)	_____	_____	_____	_____	_____

APPENDIX B

Letter and Questionnaire Sent to
Business Management Graduates

Dear :

I am conducting a study for my doctoral dissertation in the Department of Vocational Education at the Pennsylvania State University under the direction of Professor Angelo C. Gillie, Sr. It is my hope that the outcome of this study will improve the Business Administration Department Curriculum at the Community College so that we may better meet the needs of our students and their prospective employers. To do this we need your help.

Automation and the computers are changing the business setup so rapidly that we cannot predict today what our students will encounter even two years from now. Only good basic training will keep them employable in this rapidly changing world.

You are meeting these changes every day. Think back. Which courses have helped you the most in your job? Which ones could have been eliminated? Is there other training you now realize could have been advantageous?

Enclosed is a brief questionnaire designed to help us evaluate our present Management Curriculum. Through your realistic and frank answers, this task can be accomplished. You have taken the courses and are now employed in the trade. You, better than anyone, know if your training has been worthwhile. Only group statistics will be used in this study; therefore, your responses will remain anonymous, as provided by the coded identifier.

Will you please take ten minutes of your time to complete the questionnaire and return it in the enclosed envelope as soon as possible. An analysis of the findings will be mailed to you at a later date.

Sincerely yours,

Donald B. Bergerstock, Chairman
Business Administration Department

Enclosures

NOTE TO PARENTS

If your son or daughter is not living at the above address, will you please see that he or she receives this material. Thank you.

_ _ _ _ _ _ _ _Coded Identifier

Name of Employer_____

Address of Employer_____

Present Title_____

Present annual salary (before deductions) $_____

Number of times you changed employers since graduation. _____

1. Please check the column that would indicate the extent to which you use the following Associate Degree topics on your present job:

	Very Much	Much	Some	Little	None
Accounting Principles	____	____	____	_____	____
Marketing	____	____	____	_____	____
Income Tax Accounting	____	____	____	_____	____
Business Communications	____	____	____	_____	____
Business Mathematics	____	____	____	_____	____
Typewriting	____	____	____	_____	____
Business Machines	____	____	____	_____	____
Computer Programming	____	____	____	_____	____
Principles of Business	____	____	____	_____	____
Business Law	____	____	____	_____	____
Business Organization and Management	____	____	____	_____	____
Finance	____	____	____	_____	____

2. Rank the following courses in the order which you feel they helped to prepare you for your present job. The course considered the most important should be ranked 1, while the least important course of this group should be ranked 6:

Rank Order	Courses
_____	Elementary Accounting
_____	Typewriting
_____	Computer Programming
_____	Principles of Business
_____	Business Organization and Management
_____	Marketing

3. Please check the most appropriate response for each of the following. The instructors I had while enrolled in the Business Administration Department at WACC:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a. showed concern for me on a personal basis	_____	_____	_____	_____	_____
b. were willing to spend extra time with me	_____	_____	_____	_____	_____
c. increased my interest in a business career	_____	_____	_____	_____	_____
d. gave me an understanding of management concepts	_____	_____	_____	_____	_____

4. Please check the most appropriate response for each of the following. I feel the Business Management Curriculum at WACC should have a course in:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a. Purchasing Management	_____	_____	_____	_____	_____
b. Managerial Accounting	_____	_____	_____	_____	_____
c. Retailing	_____	_____	_____	_____	_____
d. Other_____ (Please list)	_____	_____	_____	_____	_____

APPENDIX C

Letter and Questionnaire Sent to
Secretarial Graduates

Dear :

I am conducting a study for my doctoral dissertation in the Department of Vocational Education at the Pennsylvania State University under the direction of Professor Angelo C. Gillie, Sr. It is my hope that the outcome of this study will improve the Business Administration Department Curriculum at the Community College so that we may better meet the needs of our students and their prospective employers. To do this we need your help.

Automation and the computers are changing the business setup so rapidly that we cannot predict today what our students will encounter even two years from now. Only good basic training will keep them employable in this rapidly changing world.

You are meeting these changes every day. Think back. Which courses have helped you the most in your job? Which ones could have been eliminated? Is there other training you now realize could have been advantageous?

Enclosed is a brief questionnaire designed to help us evaluate our present Secretarial Curriculum. Through your realistic and frank answers, this task can be accomplished. You have taken the courses and are now employed in the trade. You, better than anyone, know if your training has been worthwhile. Only group statistics will be used in this study; therefore, your responses will remain anonymous, as provided by the coded identifier.

Will you please take ten minutes to complete the questionnaire and return it in the enclosed envelope as soon as possible. An analysis of the findings will be mailed to you at a later date.

Sincerely yours,

Donald B. Bergerstock, Chairman
Business Administration Department

Enclosures

NOTE TO PARENTS

If your son or daughter is not living at the above address, will you please see that he or she receives this material. Thank you.

_ _ _ _ _ _ _ _Coded Identifier

Name of Employer_____

Address of Employer_____

Present Title_____

Present annual salary (before deductions) $_____

Number of times you changed employers since graduation. _____

1. Please check the column that would indicate the extent to which you use the following Associate Degree topics on your present job:

	Very Much	Much	Some	Little	None
Accounting Principles	____	____	____	_____	____
Dictation and Transcription	____	____	____	_____	____
Keypunch Operation	____	____	____	_____	____
Business Communications	____	____	____	_____	____
Business Mathematics	____	____	____	_____	____
Typewriting	____	____	____	_____	____
Business Machines	____	____	____	_____	____
Computer Programming	____	____	____	_____	____
Office Practice	____	____	____	_____	____

2. Rank the following courses in the order which you feel they helped to prepare you for your present job. The course considered the most important should be ranked 1, while the least important course of this group should be ranked 6:

Rank Order	Course
_____	Elementary Accounting
_____	Typewriting
_____	Office Practice
_____	Shorthand
_____	Business Communications
_____	Business Machines

3. Please check the most appropriate response for each of the following. The instructors I had while enrolled in the Business Administration Department at WACC:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a. showed concern for me on a personal basis	_____	_____	_____	_____	_____
b. were willing to spend extra time with me	_____	_____	_____	_____	_____
c. increased my interest in a business career	_____	_____	_____	_____	_____
d. gave me an understanding of secretarial concepts	_____	_____	_____	_____	_____

4. Please check the most appropriate response for each of the following. I feel the Secretarial Curriculum at WACC should have a course in:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a. Machine Shorthand	_____	_____	_____	_____	_____
b. Computer Programming	_____	_____	_____	_____	_____
c. Keypunching	_____	_____	_____	_____	_____
d. Other_____ (Please list)	_____	_____	_____	_____	_____

APPENDIX D

Letter and Questionnaire Sent to
Employers of Accounting Graduates

Dear :

I am conducting a study for my doctoral dissertation in the Department of Vocational Education at the Pennsylvania State University under the direction of Professor Angelo C. Gillie, Sr. It is my hope that the outcome of this study will improve the Business Administration Department Curriculum at the Community College so that we may better meet the needs of those who employ our graduates. To do this we need your help.

Automation and the computers are changing the business setup so rapidly that we cannot predict today what our students will encounter even two years from now. Only good basic training will keep them employable in this rapidly changing world.

Enclosed is a brief questionnaire designed to help us evaluate our present Accounting Curriculum. Through your realistic and frank answers we can accomplish this task. You, better than anyone, know if our graduates are being trained in the manner which you, the employer, deem necessary.

Your replies, and the replies of other employers, will give us a basis for evaluating and revising our curriculum. Where are inadequacies, we wish to correct them; desirable features and strong points, we wish to retain and improve. In this way, we hope to assist you in obtaining the type of personnel you need and to help our students obtain the most useful training. Only group statistics will be used in this study; therefore, your response will remain anonymous, as provided by the coded identifier.

Will you please take ten minutes of your time to complete the questionnaire and return it in the enclosed envelope as soon as possible. An analysis of the findings will be mailed to you at a later date.

Sincerely yours,

Donald B. Bergerstock, Chairman
Business Administration Department

Enclosures

_ _ _ _ _ Coded Identifier

1. Rank the importance of the following attributes which you feel an Accounting graduates should possess. Most important = 5, Least important = 1.

   Circle the rank order from 5 to 1 for each of the following:

   5 4 3 2 1 understand accounting concepts

   5 4 3 2 1 understand managerial concepts

   5 4 3 2 1 be familiar with computer programming

   5 4 3 2 1 be able to write accounting reports

   5 4 3 2 1 understand auditing principles and practices

2. Please check the most appropriate response for each of the following.

   The WACC Accounting graduates employed by our firm:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a. have adequate skills to adapt to our particular type of business					
b. have adequate skills in accounting to perform satisfactorily					
c. are able to analyze and interpret financial statements					
d. generally display ability to get along with fellow employees					
e. are qualified to assume managerial positions					
f. are able to make decisions which are helpful to our business					

3. Check the extent to which the Accounting graduates need to know how to use the following types of office equipment:

	Very Much	Much	Some	Little	None
Typewriter	____	____	____	_____	____
Full-Keyboard-adding-listing machine	____	____	____	_____	____
Ten-Key adding-listing machine	____	____	____	_____	____
Rotary Calculator	____	____	____	_____	____
Electronic Calculator	____	____	____	_____	____
Printing Calculator	____	____	____	_____	____
Dictating Equipment	____	____	____	_____	____
Bookkeeping Machine	____	____	____	_____	____

4. Check the extent to which the Accounting graduates need to know how to use the following types of data processing equipment:

	Very Much	Much	Some	Little	None
Keypunch	____	____	____	_____	____
Verifier	____	____	____	_____	____
Computer	____	____	____	_____	____
Terminal	____	____	____	_____	____
Unit Record Equipment (Collator, Sorter, etc.)	____	____	____	_____	____

APPENDIX E

Letter and Questionnaire Sent to
Employers of Business Management Graduates

Dear :

I am conducting a study for my doctoral dissertation in the Department of Vocational Education at the Pennsylvania State University under the direction of Professor Angelo C. Gillie, Sr. It is my hope that the outcome of this study will improve the Business Administration Department Curriculum at the Community College so that we may better meet the needs of those who employ our graduates. To do this we need <u>your</u> help.

Automation and the computers are changing the business setup so rapidly that we cannot predict today what our students will encounter even two years from now. Only good basic training will keep them employable in this rapidly changing world.

Enclosed is a brief questionnaire designed to help us evaluate our present Management Curriculum. Through your realistic and frank answers we can accomplish this task. You, better than anyone, know if our graduates are being trained in the manner which you, the employer, deem necessary.

Your replies, and the replies of other employers, will give us a basis for evaluating and revising our curriculum. Where there are inadequacies, we wish to correct them; desirable features and strong points, we wish to retain and improve. In this way, we hope to assist you in obtaining the type of personnel you need and to help our students obtain the most useful training. Only group statistics will be used in this study; therefore, your response will remain anonymous, as provided by the coded identifier.

Will you please take ten minutes of your time to complete the questionnaire and return it in the enclosed envelope as soon as possible. An analysis of the findings will be mailed to you at a later date.

Sincerely yours,

Donald B. Bergerstock, Chairman
Business Administration Department

Enclosures

_ _ _ _ _ Coded Identifier

1. Rank the importance of the following attributes which you feel a Management graduate should possess. Most important = 5, Least important = 1.

   Circle the rank order from 5 to 1 for each of the following:

   5 4 3 2 1 understand accounting concepts

   5 4 3 2 1 understand managerial concepts

   5 4 3 2 1 be familiar with computer programming

   5 4 3 2 1 understand organizational structures

   5 4 3 2 1 be able to motivate others

2. Please check the most appropriate response for each of the following.

   The WACC Management graduates employed by our firm:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a. have adequate skills to adapt to our particular type of business					
b. have adequate skills in accounting to perform satisfactorily					
c. have an adequate understanding of management theory and application					
d. generally display ability to get along with fellow employees					
e. are qualified to assume managerial positions					
f. are able to make decisions which are helpful to our business					

3. Check the extent to which the Management graduates need to know how to use the following types of office equipment:

	Very Much	Much	Some	Little	None
Typewriter	____	____	____	_____	____
Full-Keyboard adding-listing machine	____	____	____	_____	____
Ten-Key adding-listing machine	____	____	____	_____	____
Rotary Calculator	____	____	____	_____	____
Electronic Calculator	____	____	____	_____	____
Printing Calculator	____	____	____	_____	____
Dictating Equipment	____	____	____	_____	____
Bookkeeping Machine	____	____	____	_____	____

4. Check the extent to which the Management graduates need to know how to use the following types of data processing equipment:

	Very Much	Much	Some	Little	None
Keypunch	____	____	____	_____	____
Verifier	____	____	____	_____	____
Computer	____	____	____	_____	____
Terminal	____	____	____	_____	____
Unit Record Equipment (Collator, Sorter, etc.)	____	____	____	_____	____

APPENDIX F

Letter and Questionnaire Sent to
Employers of Secretarial Graduates

Dear :

I am conducting a study for my doctoral dissertation in the Department of Vocational Education at the Pennsylvania State University under the direction of Professor Angelo C. Gillie, Sr. It is my hope that the outcome of this study will improve the Business Administration Department Curriculum at the Community College so that we may better meet the needs of those who employ our graduates. To do this we need your help.

Automation and the computers are changing the business setup so rapidly that we cannot predict today what our students will encounter even two years from now. Only good basic training will keep them employable in this rapidly changing world.

Enclosed is a brief questionnaire designed to help us evaluate our present Secretarial Curriculum. Through your realistic and frank answers we can accomplish this task. You, better than anyone, know if our graduates are being trained in the manner which you, the employer, deem necessary.

Your replies, and the replies of other employers, will give us a basis for evaluating and revising our curriculum. Where there are inadequacies, we wish to correct them; desirable features and strong points, we wish to retain and improve. In this way, we hope to assist you in obtaining the type of personnel you need and to help our students obtain the most useful training. Only group statistics will be used in this study; therefore, your response will remain anonymous, as provided by the coded identifier.

Will you please take ten minutes of your time to complete the questionnaire and return it in the enclosed envelope as soon as possible. An analysis of the findings will be mailed to you at a later date.

Sincerely yours,

Donald B. Bergerstock, Chairman
Business Administration Department

Enclosures

_ _ _ _ _ Coded Identifier

1. Rank the importance of the following attributes which you feel a Secretarial graduate should possess. Most important = 5, Least important = 1.

   Circle the rank order from 5 to 1 for each of the following:

   5 4 3 2 1 understand secretarial concepts

   5 4 3 2 1 understand office procedures

   5 4 3 2 1 be familiar with office machines

   5 4 3 2 1 be able to compose letters and reports

   5 4 3 2 1 be able to file and locate correspondence

2. Please check the most appropriate response for each of the following.

   The WACC Secretarial graduates employed by our firm:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a. have adequate skills to adapt to our particular type of business					
b. have adequate skills in secretarial training to perform satisfactorily					
c. are capable of handling telephone and personal callers competently					
d. generally display ability to get along with fellow employees					
e. are qualified to assume responsibility					
f. are able to make suggestions which are helpful to our office					

3. Check the extent to which the Secretarial graduates need to know how to use the following types of office equipment:

	Very Much	Much	Some	Little	None
Typewriter	___	___	___	___	___
Full-Keyboard adding-listing machine	___	___	___	___	___
Ten-Key adding-listing machine	___	___	___	___	___
Rotary Calculator	___	___	___	___	___
Electronic Calculator	___	___	___	___	___
Duplicating Equipment	___	___	___	___	___
Transcribing Equipment	___	___	___	___	___
Switchboard (PBX)	___	___	___	___	___
Mag-Card Selectric Typewriter	___	___	___	___	___

4. Check the extent to which the Secretarial graduates need to know how to use the following types of data processing equipment:

	Very Much	Much	Some	Little	None
Keypunch	___	___	___	___	___
Verifier	___	___	___	___	___
Computer	___	___	___	___	___
Terminal	___	___	___	___	___
Unit Record Equipment (Collator, Sorter, etc.)	___	___	___	___	___

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